

Town of Fort Myers Beach
Agenda Item Summary

Blue Sheet Number: 2010-093

1. Requested Motion:

Motion to approve resolution 10-21, and forward a copy to the South Florida Water Management District.

Meeting Date:

August 16, 2010

Why the action is necessary:

To encourage the South Florida Water Management District to develop a rule that will protect and restore the fragile ecology of Estero Bay

What the action accomplishes:

2. Agenda:

☐ Consent
☒ Administrative

3. Requirement/Purpose:

☒ Resolution
☐ Ordinance
☐ Other

4. Submitter of Information:

☐ Council
☒ Town Staff
☒ Town Attorney

5. Background:

The natural estuarine balance of Estero Bay has been impacted by changes in the timing and volume of fresh water inflows to the bay which in turn affects the quality of the eco-systems in Estero Bay. State Statute directs the South Florida Water Management District to develop a list of priority water bodies for development of a Minimum Flow and Level (MFL) to protect water bodies from "significant harm". The Comprehensive plan states that the "Town of Fort Myers Beach will take all feasible steps to protect its marine and estuarine habitats and finfish/shellfish resources to ensure their long-term viability and productivity for scientific, commercial, sport, and recreational purposes." This resolution will encourage the Florida Water Management District to develop Optimal Flows for Mullock Creek, Hendry Creek, Estero River, Spring Creek, and the Imperial River as well as Estero Bay that would not allow for any harm to occur to the ecology of Estero Bay


6. Alternative Action:

Not approve the Resolution.

7. Management Recommendations:

Approve the Resolution and forward a copy to the South Florida Water Management District.

8. Recommended Approval:

Town Manager	Town Attorney	Finance Director	Public Works Director	Community Development Director	Cultural Resources Director	Town Clerk
						

9. Council Action:

☐ Approved ☐ Denied ☐ Deferred ☐ Other

RESOLUTION 10-21

A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF FORT MYERS BEACH URGING THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT TO IMPLEMENT MINIMUM FLOW LEVEL (MFL) PLANNING TO PROTECT ESTERO BAY, PROVIDING AN EFFECTIVE DATE.

WHEREAS, Estero Bay was designated as the State of Florida's first Aquatic Preserve in 1966 for the purpose of preserving the area in an essentially natural condition so that its aesthetic, biological and scientific values could endure for the enjoyment of future generations; and

WHEREAS, Estero Bay and its tributaries have been designated by the State of Florida as Outstanding Florida Waters; and

WHEREAS, Estero Bay is vitally important to commercial and recreational fisheries which include tarpon, snook, redfish, blue crab, shrimp, stone crab, and mullet; and

WHEREAS, a significant number of the state's endangered and threatened species are found with the area of Estero Bay and the area is home to many bird nesting colonies and is an important stopping area for migrating birds; and

WHEREAS, the natural estuarine balance of Estero Bay has been impacted by changes in the timing and volume of fresh water inflows to the bay; and

WHEREAS, the Town of Fort Myers Beach Comprehensive Plan states that the Town shall take a leadership role in facilitating resolution of any jurisdictional problems; and

WHEREAS, Chapter 373, Florida Statutes, requires the South Florida Water Management District to submit to the Florida Department of Environmental Protection a priority list of water bodies for MFL development and Estero Bay is on the 2010 Priority List and Schedule for MFLs; and

WHEREAS, the Town believes it is essential that the South Florida Water Management District develop an Optimal Flow and Level for Estero Bay, Mullock Creek, Hendry Creek, Estero River, Spring Creek, and the Imperial River that will protect the delicate ecology of Estero Bay.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF FORT MYERS BEACH, FLORIDA, AS FOLLOWS:

Section 1. The foregoing recitals are hereby adopted and incorporated herein.

Section 2. The Town Council hereby urges the South Florida Water Management District to implement MFL planning to protect the ecology of Estero Bay. Such planning should include, but is not limited to, the development of a comprehensive Optimal Flow and Level that includes not only Estero Bay, but also Mullock Creek, Hendry Creek, Estero River, Spring Creek and the Imperial River that will protect the delicate ecological balance of that entire area.

Section 3. Effective Date.

This Resolution shall become effective immediately upon adoption by the Town Council of the Town of Fort Myers Beach, Florida.



Town of Fort Myers Beach

Memo

To: Terry Stewart, Town Manager

Cc:

From: Keith Laakkonen, Environmental Sciences Coordinator

Date: July 30, 2010

Re: Minimum Flows and Level for Estero Bay

Per your direction, I have put together this brief synopsis of the importance of increased watershed protection for Estero Bay.

Estero Bay was designated as the State of Florida's first Aquatic Preserve in 1966. Estero Bay was established as an Aquatic Preserve "for the purpose of being preserved in an essentially natural or existing condition so that their aesthetic, biological and scientific values may endure for the enjoyment of future generations (Chapter 18-20 F.A.C.)." Estero Bay and parts of its tributaries are also classified as Outstanding Florida Waters (OFW's) which are "worthy of special protection because of their natural attributes (Chapter 62-302 F.A.C.)."

Estero Bay includes over 11,000 acres of open water, mangroves, seagrass beds, mangrove islands, salt marshes, tidal flats and oyster bars. Estero Bay is a productive estuary that is driven by a combination of tidal action and the influence of five tributaries which include; Mullock Creek, Hendry Creek, Estero River, Spring Creek, and the Imperial River. Estuaries are driven by a natural balance of fresh water influence meeting the waters of the open ocean that is driven by seasonality and the contributing watershed. Estuarine systems have a variety of habitats driven by changes over a salinity gradient from nearly fresh to marine contingent on the timing and volume of fresh water inflows to the estuary. Many species of fish, birds, mammals, and invertebrates depend on estuaries for at least part of their life cycle. Of particular note, many important commercial and recreational fisheries are dependant upon the waters of Estero Bay for some part of their life stage including tarpon, snook, redfish, blue crab, shrimp, stone crab, and mullet. Approximately 40% of the state's endangered and threatened species are also found within this area and it is especially important for bird nesting colonies and a valuable stopover area for migrating birds.

Development and alterations in the 290 square mile watershed of Estero Bay have changes the natural flow of fresh water into Estero Bay. These alterations include loss of natural upland habitats, draining and loss of wetlands, channelization, and the construction of canals. The intent of much of these development practices is to drain as much water as possible quickly out of developed areas. This has altered the timing and volume of fresh water inflows to the estuary which in turn alters the aquatic and wetland community structure. Alterations to the watershed also contribute to changes in nutrient loading to the estuary and several areas of the watershed of Estero Bay have been found by the state to have water quality impairments. The Town of Fort Myers Beach Comprehensive Plan states that "Estero Bay has fair water quality with increasing threats to its long Environmental quality in Estero

Bay is particularly vulnerable to future degradation due to poor flushing, the bay's small volume of water, and increasing urbanization of the watershed".

Goal 6 of the Town of Fort Myers Beach Comprehensive Plan states that: To protect the natural resources in and around the town from further damage and improve their future health and sustainability through regulations, education, enforcement, timely management, public improvements, and cooperation with other entities with similar goals.

Policy 6-A-1 of the Town of Fort Myers Beach Comprehensive Plan states that "Estuaries are the ecological transition between fresh and saltwater systems. They provide extensive habitat for fish and wildlife including the feeding, breeding, and nursery ground for most of the commercially important fish and shellfish and many species of local and migratory birds, while offering a broad array of recreational opportunities. The Town of Fort Myers Beach will take all feasible steps to protect its marine and estuarine habitats and finfish/shellfish resources to ensure their long-term viability and productivity for scientific, commercial, sport, and recreational purposes. The town shall take a leadership role in enacting ordinances and facilitating resolution of jurisdictional problems."

One of the most effective and prudent steps towards increased stewardship of Estero Bay is the development and implementation of Minimum Flows and Levels (MFL's). Chapter 373.042 F.S. defines an MFL as "The minimum water level for a given watercourse shall be the limit at which further withdrawals would be significantly harmful to the water resources or ecology of the area". Note the terms "significantly harmful" which clearly allows for some subjective level of harm to occur to the ecology of an ecosystem. Chapter 373.042 F.S. also directs the Water Management Districts to submit to the Florida Department of Environmental Protection a list of priority list of water bodies for MFL development. Estero Bay is on the South Florida Water Management District's 2010 Priority List and Schedule for MFL's. However, there is concern over the technique to get to an MFL. Due to the importance of Estero Bay to the regional ecology and in particular to the long term livability and economy of the Fort Myers Beach, the Town should strongly encourage the South Florida Water Management District to develop an Optimal Flow and Level that would not allow for any harm to occur to the ecology of Estero Bay. The Town should also encourage the Florida Water Management District to develop Optimal Flows for Mullock Creek, Hendry Creek, Estero River, Spring Creek, and the Imperial River as well as Estero Bay to avoid impacting one part of the bay in order to manage another part.